

21. The method of Claim 20 wherein the determination circuit is further configured to estimate interferer signal characteristics for the known block and selects the desired demodulation type based on the estimated interferer signal characteristics.

5 22. The system of Claim 21 wherein the interferer signal characteristic discontinuity comprises an interferer signal slot misalignment relative to a slot alignment of a desired signal component of the received signal.

23. The system of Claim 22 wherein the demodulator is configured to  
10 perform a selected one of uni-directional demodulation or bi-directional demodulation.

24. The system of Claim 23 wherein the demodulator further comprises a multi-pass demodulator and wherein the identification circuit is configured to identify  
15 the known block based on symbol estimates generated by a first pass demodulation of the sequence of bits by the multi-pass demodulator.

25. The system of Claim 19 wherein the system comprises a mobile terminal.  
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26. The system of Claim 19 wherein the system comprises a base station transceiver.

27. A system for processing a received signal comprising:  
25 a receiver that receives the signal to provide a sequence of symbols associated with the received signal in respective ones of a plurality of symbol positions;  
a first pass demodulator/decoder that first pass demodulates and decodes the sequence of symbols to provide error corrected decoded bits;  
a reencoder circuit that recodes and modulates the error corrected decoded bits  
30 to provide a second sequence of symbols associated with the received signal in respective ones of the plurality of symbol positions, the second sequence of symbols including known symbol values based on the first pass demodulating and decoding;

a partition circuit that partitions the sequence of symbols into a plurality of subfields, ones of the subfields including a plurality of the known symbol values selected to determine a desired demodulation type for use in demodulating the subfields based on the plurality of known symbol values;

5           a determination circuit that determines the desired demodulation type for use in demodulating the subfields based on the plurality of known symbol values of the respective ones of the subfields; and

a second pass demodulator that demodulates the subfields using the respective determined desired demodulation types.

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28.    The system of Claim 27 wherein the first pass demodulator and the second pass demodulator comprise a multi-pass demodulator.

29.    The system of Claim 27 wherein the desired demodulation type is  
15 selected from the group consisting of non-interferer cancellation and interferer cancellation.

30.    The system of Claim 29 wherein the system further comprises a detector circuit that detects an interferer signal characteristic discontinuity location in  
20 the sequence of symbols.

31.    The system of Claim 30 wherein the partition circuit partitions the sequence of symbols into a plurality of subfields so as to position a detected interferer signal characteristic discontinuity location at a transition between ones of the  
25 subfields.

32.    The system of Claim 27 wherein the system comprises a mobile terminal.

33.    The system of Claim 27 wherein the system comprises a base station transceiver.  
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34. A system for processing a received signal, the system comprising:  
means for receiving the signal to provide a sequence of symbols associated  
with the received signal in respective ones of a plurality of symbol positions;  
means for identifying a known block of the sequence of symbols containing  
5 known symbol values and an unknown block of the sequence of symbols containing  
unknown symbol values;  
means for determining a desired demodulation type for use in demodulating  
the unknown block based on the known symbol values;  
means for detecting an interferer signal characteristic discontinuity location in  
10 the unknown block; and  
means for demodulating the unknown block using a first selected  
demodulation type between the interferer signal characteristic discontinuity and the  
known block and a second selected demodulation type on another portion of the  
unknown block, the first selected demodulation type and the second selected  
15 demodulation type being selected based on the determined desired demodulation type  
for use in demodulating the unknown block and the detected interferer signal  
characteristic discontinuity.

35. The system of Claim 34 wherein the means for determining a desired  
20 demodulation type for use in demodulating the unknown block based on the known  
symbol values further comprises means for selecting either non-interferer cancellation  
or interferer cancellation demodulation as the desired demodulation type for use in  
demodulating the unknown block.

36. The system of Claim 35 wherein means for determining a desired  
25 demodulation type for use in demodulating the unknown block based on the known  
symbol values further comprises means for estimating interferer signal characteristics  
for the known block and selecting either non-interferer cancellation or interferer  
cancellation demodulation based on the estimated interferer signal characteristics.

37. The system of Claim 36 wherein interferer cancellation demodulation  
30 is selected for either the first selected demodulation type or the second selected  
modulation type and wherein the means for demodulating the unknown block using a